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Extension Service REVIEW



Power in Production—

To Back the Democracies To Bring Abundance to Americans

MILO PERKINS, Administrator, Surplus Marketing Administration

1 The ability to produce abundantly gives potential power. This war which the democracies are waging is one of production. At present the democracies find themselves at a great disadvantage because the totalitarians got a jump of 5 or 6 years in terms of production. Only a vastly greater present and future production is going to overthrow them.

In considering the present war, there is a tendency to go back 25 years and pick up old habits of thought from the other World War without realizing the tremendous changes that have taken place.

Today we have some 12 million bales of cotton and 500 million bushels of wheat and will have at the beginning of the corn year 'between 7 and 8 hundred million bushels of corn. This is real wealth that we can use. It will help in the struggle that is now going on and will help when that struggle is over. Last time we found ourselves with scarcity—today we find ourselves for the most part with abundance, not only in terms of stocks on hand but also abundance in terms of our capacity to produce. We have the chance during this world situation to use abundance, to use it constructively, and to use it in such a fashion as to give strength to the effort to overthrow the totalitarians.

The 1941 machinery for handling this abundance is functioning right now in the Department of Agriculture. Production can be adjusted either upward or downward. Supplies can be distributed to those who need them. This is the sort of administration which did not exist during the last war, and it is machinery which makes sense in a world where you can produce abundantly. The Hoover Food Administration would have given its eye teeth for this administrative machinery.

When the task of buying for Britain under the Lease-Lend Act came along, we were able to take it pretty much in our stride. We had in the Department of Agriculture an organization 6 or 7 years old equipped to do the job. Starting out as the Federal Surplus Commodities Corporation, and now called the Surplus Marketing Administration, the organization employs about 3,000 people

and has been buying a hundred or more million dollars' worth of food a year to distribute among needy people and for free school lunches for undernourished children.

Acquiring food for Britain has been made more difficult by the need for a certain amount of military secrecy and by the fact that the British themselves cannot know accurately from day to day and from week to week just exactly what they are going to be able to take from us the next month. Furthermore, they want foods that we have not normally exported; and they do not want much of the wheat, cotton, and tobacco that we formerly sold abroad. Fortunately, we have many ways to use surplus foods which we are acquiring. One of the basic principles upon which we are operating in the buying of food is the fact that there are five outlets for the foodstuffs which we purchase, only one of which is Britain or another democracy under the Lease-Lend Act.

Five Outlets for Surplus

If the British overestimate on a particular kind of food they want, and we have that food on hand, it can be distributed for our school lunches. On the other hand, if they need food which we perhaps originally thought we might use for school lunches, we can turn it over to them and get other foods for school lunches. Some of the purchased food is made available to the Red Cross, for whom we have acted as purchasing agent for about a year now. The Red Cross sends that food to refugees in the various parts of the world. Again, we can use the food for direct distribution through State welfare agencies to families on relief.

Because we have all these ways to use the foods we are buying, we can safely take chances we would not dare take if Britain were the only outlet. We have been able to buy pork and dairy products and eggs in greater quantities during the spring months than would have been possible otherwise. As a result, hundreds of millions of dollars have been added to farm income during a time of heavy marketings. Farmers, rather than speculators, have received the benefit

of Government food purchases because of the volume bought and the way the purchases were timed.

Another important use for the food supplies we buy will be the building of food reserves which can be released in the market if needed to effect reasonable stability of prices. We have been doing this for the last two winters on butter. If prices start soaring to a point where we face a spiraling inflation, that fact is quite likely to bring about just the kind of regimentation which we are trying to overthrow elsewhere in the world. We do not want it in our country. We do not want licensing of retail outlets or exact determination of what the market should be and what the farmer should get and other regimentations of that kind. Farmers are likely to get the worst of such an arrangement in the long run.

Britain is taking everything she needs through the Department of Agriculture and not directly from processors on the basis of their own bids; we are coordinating these purchases with domestic supply and domestic needs. Fortunately, the 1941 model food administration is not faced with the necessity of rationing scarcity. We are attempting to use our abundance so as to build up the strength of the democracies and to get the maximum income for farmers which is sound and possible.

We are going to need some sharp increases in production to meet the demand created by rising purchasing power among the people who are being reemployed in this country, plus Army and British buying. We also need to maintain, on a skeleton basis, distribution of foodstuffs to needy families here in the United States so as to help cushion the shock of post-war adjustment. One of our toughest problems right now is to get enough eggs and cheese and pork products and evaporated and dried skim milk to meet the demands upon us. Farmers should do everything they can to step up production of these concentrated animal protein foods. If they are timid about it, they will weaken the total defense efforts of the democracies. Except for these foods, agriculture is overprepared, if anything, for this emergency.

Published monthly by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business, and with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. The REVIEW is issued free by law to workers engaged in extension activities. Others may obtain copies from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 10 cents per copy or by subscription at \$1 a year, domestic, and \$1.40, foreign. Postage stamps are not acceptable in payment.

EXTENSION SERVICE, U. S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C. • M. L. WILSON, Director • REUBEN BRIGHAM, Assistant Director

Tarheels Show United Food Front

JOHN FOX, Assistant Editor, North Carolina Extension Service

■ A campaign to enroll North Carolina's 300,000 farm families in a "Food and Feed for Family Living" program has resulted in the formation of a united front by all agricultural agencies in the Tarheel State against not only the food-and-feed crisis but against other rural problems—current and future.

The campaign began in April with 50,000 or more farm families enrolled during the first week or 10 days. With this auspicious beginning, agricultural workers' councils in every one of North Carolina's 100 counties began the follow-up task of personally contacting as many as possible of the other 250,000 farm families.

Each farm family was asked to sign a card volunteering to produce adequate food and feed for all people, livestock, and poultry on the farm. Those who produce and save as much as 75 percent of their food-and-feed requirements will be recognized during the fall and winter at public meetings at which certificates of achievement will be awarded. The certificates will be signed by Gov. J. M. Broughton of North Carolina and by the agricultural leaders of the State.

The Food and Feed for Family Living Campaign was started with a public announcement by Governor Broughton and was begun in response to a decision by southern governors that food-and-feed production would be stressed in 1941 as a part of their 10-year plan for "Balanced prosperity in the South."

The Extension Service was asked to take the lead. It had successfully led a great live-at-home campaign in the depression era, and this became a model throughout the United States. As a result, the State suffered less during the early days of the depression than almost any other Southern State. In planning the new program for 1941, note was taken of similar campaigns which were conducted successfully in South Carolina and Tennessee.

It was realized that letters containing enrollment cards, food and feed charts, and

written appeals would not be enough to reach a desirable number of farm families. A State agricultural workers' council, composed of the heads of all agricultural agencies, was formed. Membership includes the State leaders of the Extension Service, Vocational Education, Farm Security Administration, AAA, Soil Conservation Service, Bureau of Agricultural Economics, and WPA. This council agreed to meet once each month to discuss, plan, and coordinate agricultural activities.

The council idea was then extended to the counties, out where the job of personal contacts with farm families must be done. The land-use planning staff of the Extension Service and the Bureau of Agricultural Economics was assigned the job of helping to organize county agricultural workers' councils, to include paid agricultural workers, leaders of the AAA and the home-demonstration councils, and representatives of such other agencies and groups as the grange, the farm bureau, county commissioners, public health and welfare officials, rural ministers, and as many others as the county workers thought desirable.

Councils in Every County

Within 2 weeks, a county agricultural workers' council had been formed in every one of North Carolina's 100 counties. The counties were divided into communities, and each member of the county council agreed to take charge of the campaign in a given community, contacting as many families as possible and enlisting the assistance of others to make personal appeals.

Thus, agricultural workers are united on a permanent basis. They will meet at least once a month—in some counties oftener—to plan a county-wide program which will avoid overlapping and will serve all the farm people in the most effective manner. Representatives of the various agencies are now in a position to call upon workers of other

agencies to help them conduct emergency programs. And they have the support of their State leaders, who will do the same thing.

The appeal to farm people in the North Carolina food-and-feed campaign is based both on patriotism and on the fundamental fact that production of adequate supplies for farm and home use is "the sensible thing to do" in the present defense emergency. Most of the letters accompanying the enrollment cards contained such statements as these: "It is good citizenship for us to prepare for the present emergency. Adequate food by means of good gardens, fruits, eggs, butter, milk, meat, and the like means that the family can be maintained in good health at low cost. Adequate feed for our livestock means that we shall adopt a well-balanced system of farming. . . ."

Within 1 week after the letters were mailed, 1,000 enrollment cards had been returned in Rutherford County.

The Extension Service printed and distributed through farm and home agents, 300,000 enrollment cards and 300,000 food-and-feed charts as a starter. Subsequent calls for more cards and more charts have already led to the printing of another 200,000 of each. The charts show the amount of daily and annual food requirements for individuals and for families of five.

Special master certificates will be awarded to landlords who induce all of their tenants to produce and save 75 percent or more of their food and feed needs for the year.

A recent survey by the Extension Service, in cooperation with the AAA, indicated that only 77 percent of the farm families in North Carolina had a garden large enough to furnish an adequate supply of fresh and canned vegetables for home use last year; only 30 percent of the farmers owned enough cows to supply sufficient milk for their families on a year-round basis; only 32 percent had enough poultry to supply family needs; and only 36 percent canned enough vegetables to meet family requirements.

Better Living for National Defense

■ In South Dakota, 13,500 families have enrolled to do their bit toward preserving the home line of defense, according to Nora M. Hott, State leader of home demonstration work.

This program, "Opportunities for Better Family Living" which was launched in January by the Extension Service, has received full cooperation from all organizations interested in the well-being of rural families.

To get the work started, a committee composed of representatives of public agencies and lay organizations was formed in each county. The whole program was discussed; the plan of procedure was outlined; and each agency described the jobs it could carry as its part of the program.

County extension agents wrote leaflets on the philosophy of the program and outlined subject matter on poultry, dairy, and vegetable production to be given at a series of open meetings over the county. Enrollment cards were prepared and handed to families attending meetings, families enrolled in home extension clubs, and families participating in the matress program. They were also mailed to other families in the county.

A series of three circular letters was prepared to send with enrollment cards to rural families. The second letter was sent to all families who did not respond to the first. The third letter contained an announcement regarding an open meeting on Food and Life. Effective newspaper publicity was carried on by agents outlining the program and giving timely hints on poultry practices, the production of clean milk, the meat supply on the farm, and the home vegetable garden.

Success Stories Help

"Success" stories showing how farm families utilized the ground below a dam for the garden, how they used simple irrigation systems for watering garden plots, and what varieties they had grown most successfully were obtained from farm families and published along with the pictures of the garden or the products.

After enrollment cards were returned, bulletins on the subjects checked were mailed to families who were also notified of open meetings held in their community on the topic, Opportunities for Better Farm Family Living. A number of new home extension clubs were organized as a result of interest developed through this farm-living program.

Numerous exhibits helped to tell the story of the value of vitamins in the diet. The step exhibit showing foods rich in each vitamin was used at meetings as well as in grocery store windows. "Vitamin tree" exhibits with leaves formed from packages of seeds were placed in windows where garden

seeds were sold. Practically all local hardware stores featured garden exhibits.

Tours to homes of demonstrators or to farms of those who have been successful in using the resources of the farm to best advantage are planned for the summer months.

The director of extension, State home demonstration and 4-H leaders, supervisors, and specialists held a number of conferences to work out a plan of procedure and to prepare subject matter. It was decided to issue five bulletins in connection with the program and to hold district training schools for agents based on these bulletins. The first bulletin, Planning, Producing, and Preserving Food Supply, was issued March 1; and the remaining bulletins, Conserving Your Health, Improving Your Farm Home Conditions, Economizing on Your Clothing, and Improving Your Farm and Home Business, will be issued after July 1 for use during the coming year. Supervisors and the State home demonstration leader met with the agents in January to discuss plans for carrying the program into effect.

During February and March, a series of 13 district training schools on the problem of planning the food supply were held for home and county extension agents, farm security supervisors, extension agents of the Indian Service, and farm men and women. Two hundred and ninety-two farm men and women who attended these schools figured out the foods needed by their families and planned gardens to take care of these needs.

At these training schools, the district supervisor opened the meeting with a talk on the philosophy of the program. Susan Z. Wilder, extension nutritionist, then discussed food values and the part vitamins play in health and efficiency and discussed food requirements for the family. Each family then figured amounts required for each member of the family. Frank Rockwell, extension horticulturist, discussed the amount of seed required to produce the vegetables needed by the family and had each family make a garden plan. He also discussed the importance of shelterbelts, windbreaks, irrigation, varieties best adapted, and cultural practices. George Gilbertson, extension entomologist, discussed how to control insects and save the garden. Nora M. Hott, State home demonstration leader, discussed procedures to be used in conducting a successful farm family living program.

Following these training schools, agents held a series of training schools in the counties for local leaders, who in turn have conducted local meetings. Dairy meetings, emphasizing the production of clean milk, and poultry meetings have been conducted in many of the counties. Special emphasis has been given the raising of quality livestock

to provide the home meat supply. Result demonstrations in gardens, poultry production, and raising the family's potato supply from certified seed have been started.

Specialists have prepared timely subject matter to be sent at intervals to those enrolling in the program. This material includes a garden calendar and a series of post cards on such subjects as getting rid of insect pests, food needs, and conditioning the home for winter.

The next step in the program is a series of six lectures on Food and Life by Prof. J. S. Hughes of the chemistry department, Kansas State College. Professor Hughes has conducted research in animal and human nutrition for the past 30 years and is an authority on the part vitamins play in the health and efficiency of the individual. The six district meetings are open to the public.

Round the Food Calendar

Methods for preparing fruits and vegetables for the freezer locker, as well as the newest and best methods of canning, will be demonstrated by specialists and agents during the summer months. When rhubarb, berries, peas, beans, and other products are ready, families are shown the best methods of taking care of them for future use.

The making of butter and cheese will be demonstrated in communities requesting such demonstrations. In the fall, storing of vegetables and fruits will be emphasized.

Later, butchering, meat cutting, canning, and curing will be demonstrated so that farm families will know the best methods of taking care of their meat supply.

To insure that more people have an opportunity to learn how to use the resources of their own farms to help them to live better for less, the news editor, the radio specialists, and the visual education specialist are cooperating with subject-matter specialists and agents in issuing a series of news releases and radio talks and in preparing a portable exhibit which can be used in every county.

Many public agencies working in the State are cooperating in this effort, including vocational agriculture and home economics, the Farm Security Administration, Indian Service, Agricultural Adjustment Administration, Bureau of Agricultural Economics, Surplus Marketing Association, Soil Conservation Service, Farm Credit Administration, Rural Electrification Administration, Social Security, and Work Projects Administration.

"Opportunities for Better Family Living" is a long-time program for every rural family and for every member of the family, which will help them to meet the present emergency in a much better way.

The Nutrition Campaign Is On

**MARGARET F. MORTON, Home Demonstration Agent,
Monroe County, Tenn.**

■ Four counties in Tennessee were selected by the State nutrition committee to start a program on nutrition, and Monroe County was one of the four counties chosen.

The Monroe County Nutrition Committee was organized in November 1940. It includes representatives of all the agencies in the county with trained personnel: The Department of Public Welfare, Health Department, Department of Education, Farm Security Administration, Work Projects Administration, Vocational Agriculture, and the Extension Service.

As a basis for setting up our nutrition program, the committee planned a survey of the nutrition practices and conditions in Monroe County. The questionnaires were distributed to both white and Negro families through the school system and other agencies.

From the 822 families reporting, totaling 4,288 white persons and 475 Negroes, we found that 137 white families and 40 Negro families had no cows. This showed a deficiency in the milk supply, one of the most basic needs in any nutrition program.

One hundred and fifty-two families had no poultry supply, and 209 families made no provision for meat, showing that greater provision should be made for protein foods in order to maintain maximum health.

Ninety-one families had no garden supply, and of the 729 families reporting gardens only 61 had year-round gardens.

In view of these facts, plans were made to stress food production as one of the most important phases of the nutrition program.

As the survey revealed that only one-half of the families included in their daily diets green or leafy vegetables and whole-grain cereals, that slightly more than one-half used fruits, and that only three-fourths had milk and butter, it was recognized that information on the right kind of foods was also necessary.

We adopted the following goals for our nutrition program: (1) At least 1 cow for every farm family and more as needed to provide an adequate milk and butter supply; (2) a year-round garden for every farm family; (3) an adequate poultry supply with a minimum of 25 hens for each family; (4) an adequate home-produced meat supply; (5) preservation of enough foods of the proper kinds and amounts for winter consumption and storage facilities for the canned products and such foods as potatoes which require winter storage; (6) meal planning for body needs by every family; (7) placing in every home helpful literature about foods and nutrition; and (8) a hot-lunch program in every school.

These goals were presented in a panel discussion by the county nutrition committee at a county-wide meeting.

As a means of accomplishing these goals, each agency represented on the committee promised to coordinate its efforts for building and maintaining maximum health for all families in Monroe County as a contribution to national defense.

The Department of Public Welfare furnished surplus commodities to needy families and instructions for their use, as well as for school lunch rooms and food-preparation demonstrations. The welfare workers enlisted their clients in the program.

The Work Projects Administration helped to build stronger boys and girls through a well-planned hot-lunch program. Twenty-one schools now have a hot-lunch program; and 72 schools receive commodities such as fresh and dried fruits, milk, whole-grain cereals, and butter. More than 60,000 hot lunches were served during the first 4 months of the school year.

The 26 WPA cooks are being trained through demonstration schools to use these foods for more nutritious meals. During the spring and summer WPA gardens are providing vegetables to be canned for use in the schools during the winter.

The Health Department is showing film strips, distributing bulletins, and holding health clinics. They are giving advice on the proper diet to correct malnutrition.

Believing that the food supply is of major importance, the Farm Security Administration has built its program around a live-at-home program. It makes loans for any item to further food production to meet family needs. Loans are for such things as cattle, seed, pressure cookers, fruit jars, and tools. Special attention is given to providing adequate food-storage facilities.

Three county teachers' meetings have been devoted to the nutrition program. Well-trained speakers, such as Dr. Kimbrough, a physician in the county, have addressed this group of 175 elementary and high-school teachers.

The film, "Britain's Undernourished," was shown to a county-wide group of about 200 persons.

Instructions, including lesson plans and illustrative materials, have been provided the elementary teachers to help them to present nutrition units to their 5,306 school children.

The vocational home economics and agricultural teachers of the four high schools are stressing nutrition in their classes and are conducting day unit classes in elementary

schools for the fifth through the eighth grades. These teachers are also giving nutritional training to the farmers and homemakers through adult classes in several communities.

Instead of conducting the usual better-homes campaign, the Extension Service this year is conducting a better-nutrition campaign with the slogan, "Help Make America Strong," by producing and eating health-giving, strength-building foods.

The importance of nutrition in the national defense program is being discussed with community clubs, home demonstration clubs, 4-H boys' and girls' clubs; civic organizations, business and professional clubs, and parent-teacher associations. In this way, all of the 70 communities in Monroe County are being reached.

A Chairman for Each Community

Mrs. J. J. Armstrong has been appointed campaign chairman for the 1941 better-nutrition campaign. A community nutrition chairman has been appointed in each of the 70 communities to assist in enrolling families in the home food supply program and in furthering the campaign.

The county agricultural agents and the home demonstration agent are conducting projects in food production with farmers, homemakers, and 4-H boys and girls.

The major activity during the spring was the promotion of the raising of protective foods through the spring garden. The spring-garden package arranged by W. C. Pelton, extension horticulturist, facilitated the carrying out of defense gardens. The amount of seed contained in the package was enough to plant 12 rows 100 feet in length. The vegetables contained in the package were turnip greens, an excellent source of vitamins and iron; tomatoes, one of our best sources of vitamin C; cabbage, a good source of vitamins A and C; carrots, an excellent source of vitamin A; and lettuce, okra, and radishes which are good sources of vitamins.

These seeds were on sale in each of the four major trade centers in the county. Directions for planting the seed and caring for the garden were distributed when the seeds were purchased, and garden tours later in the spring proved helpful.

The Lions Club of Madisonville sponsored a 50-chick club for the boys and girls of Monroe County. They gave each boy and girl wishing to enroll in the club 50 baby chicks and 50 pounds of feed. When the chickens are 25 weeks old, they will give back to the Lions Club 12 cockerels to pay for the original investment. The rest of the chickens remain the property of the boy or girl. They are being given instructions on the care of a poultry flock and on keeping the flock for the family food supply and improved diet.

The members of the 20 home demonstration clubs are receiving instructions in meal planning, with special reference to vitamins and minerals.

Hawaii Looks to Its Food Supply

■ "When 75 percent of your food comes 2,000 miles to your table and when there is only one way for that food to come, and that is in boats, an emergency in shipping or even a suggestion of an emergency makes you think twice," says H. H. Warner who recently visited Washington counseling with Government officials in the Office of Emergency Management, Surplus Marketing Administration, and the War Department on the Hawaiian Food for Defense Program which is the all-out extension program for the year.

The Extension Service is the agency to which the Governor of Hawaii and other agencies in the islands are looking to take the leadership in the food-supply program. They are thinking in terms of food-storage facilities so that a 6-month supply can be accumulated, especially of such staple foods as rice, wheat, canned milk, and fats and oils. They are also planning to use every means at hand for increasing the local production of foods.

The Extension Service is being geared to handle an emergency food-production program. Every project which does not contribute to the food supply is being temporarily sidetracked. The agronomists are studying new varieties of Kafir corn for poultry feed; the truck crops specialist is working on small irrigation facilities in truck crop areas; the animal husbandry specialist is trying desperately to improve dairy herds so that they will produce more milk; and the home demonstration agents are putting renewed energy into balanced diets and home gardens.

Plantations are starting their own gardens for their employees in many places and are asking for help from extension agents. To meet this need, an assistant county agent was employed last year to work with the plantation employees on a large sugar plantation in developing carefully planned back-yard gardens. The results of this intensive effort have proved interesting and received wide acclaim from the plantation manager.

Hawaiian extension workers are planning their first farm and home week at the University of Hawaii, Honolulu, the second week in August. Increased food production as a contribution to national defense will be the theme of the week; and, immediately following, the annual extension conference will give intensive thought to the same theme. The 15 agents and assistant agents, together with the specialists, will leave no stone unturned in their efforts to increase the food supply.

"In normal times, there may be some arguments against self-sufficiency," states Director Warner, "but now defense changes things. There is but one job for extension workers, and that is for everyone to fall to on a food-production program."

Among the obstacles to self-sufficiency in foods is the availability of water for irrigation on the small farms, the high cost of labor, and the difficulties of growing cereals in a tropical climate.

The large increase in population due to defense activities has reduced the percentage of home-grown foodstuff consumed from about 30 percent to probably less than 25 percent. This in spite of the fact that Hawaiian farmers marketed 14,000 more tons of food in 1940 than in 1935. It is evident that a food-storage program is as important as a

food-production program and that it will take the cooperation of all forces in the Territory.

Gen. Charles D. Herron, formerly commanding general in Hawaii, is now handling the storage project from the Washington angle, working with Delegate Samuel King in the House of Representatives.

With a population of 450,000 people to feed and large defense construction projects using much of the available shipping in bringing materials from the mainland, the food problem needs the best efforts of the wide-awake citizens of the Territory.

Canning Is a Family Affair

**PHYLLIS RICHARDS, Home Demonstration Agent,
Lincoln County, Wyo.**

■ Better correlation of 4-H Club work and adult work to improve home living conditions is the aim of extension workers in Lincoln County, Wyo.

The county planning committee in 1940-41 selected health and beautification as two major projects. Both subcommittees, among other goals, encouraged every family to raise an adequate vegetable garden. The gardens were exceptionally good last summer, and fruits that could not be raised were trucked in. As a result, considerable canning was done.

In all demonstrations presented on vegetable cookery, food preparation, and food preservation of adult groups as well as 4-H clubs, an attempt was made to get the entire family to feel the need for working and planning together.

A story of Mrs. Harmon's canning project shows some results of the attempts made.

Mrs. Esse Harmon, a member of the Secona Women's Home Economics Club of Fairview, Wyo., says, "Canning is a family affair." During the 1940 canning season, Mrs. Harmon, with the assistance of her family, canned more than 1,000 quarts of fruits and vegetables. Eleven members of the family are sharing the benefits.

According to Mrs. Harmon's report, of the 750 quarts of fruit canned, 320 quarts were raised in the family garden, including rhubarb, raspberries, gooseberries, and currants. Fruits purchased included peaches, pears, apricots, cherries, prunes, and tomatoes. Mrs. Harmon figures that, as a large quantity was raised in the garden, the actual average cost of her fruit per quart was 8 cents. Her saving was \$127.50 according to her estimate.

Two hundred and fifty-six quarts of vege-

tables were canned from the home garden. Mrs. Harmon said, "Our garden was better than ever this year because my son prized it as his 4-H project." No money was expended for the canned vegetables except for salt.

The estimated saving on the vegetables canned was \$60.72.

From the vegetable garden, a winter supply of carrots, squash, and cabbage was also produced.

Besides the son who carried a garden 4-H Club project, two sons carried potato projects—one on dry-farm potatoes and one on irrigated-farm potatoes. A family supply of these potatoes was also stored in the basement.

Mrs. Harmon canned 50 quarts of jams, jellies, and marmalade, and 35 quarts of pickles. She also canned 200 quarts of apples and 50 quarts of meats for summer use in the jars she had opened.

"I figure that the saving on our canned products will amount to better than \$250 this year," explained Mrs. Harmon. "The value cannot really be measured in dollars and cents alone. It means more to us, as we just would not have had it if we hadn't raised it. I could never have done it alone either, because the preparation of the vegetables and berries meant hours of work in the garden which were shared alike by my husband and children. My daughter and three sons have been especially anxious to produce good results for their 4-H exhibits, and they were very proud of the blue ribbons they won."

Mrs. Harmon has served as president of her home economics club and has always been eager to get bulletins and helpful suggestions from the Extension Service.

Farmers Honor Their Newspaper



Extension workers have always recognized the weekly newspaper as one of the principal mediums of agricultural education and information. Farmers of Haywood County, N. C., recently recognized their weekly newspaper, the Waynesville Mountaineer, and its editor W. C. Russ, for service to agriculture. A plaque (pictured at the lower left) was presented to Mr. Russ (lower right) by the Haywood County Mutual Soil Conservation and Land Use Association, which is the organization of farm-

ers cooperating with the Extension Service and the Tennessee Valley Authority in the demonstration farm program in that mountain county of North Carolina. J. C. Lynn, county agricultural agent, and W. A. Corpening and J. L. Reitzel, assistant agents, say that Mr. Russ and his newspaper cooperate loyally in all lines of extension endeavor, and Frank H. Jeter, North Carolina extension editor, adds that "there are scores of other weeklies in the State and in other parts of the country which are deserving of awards."

Largest Georgia Legume Acreage

Georgia farmers this past fall sowed 16,600,000 pounds of winter legume seed, an increase of 68 percent over the year before and 300 percent above the 10-year average, according to tabulated reports of the Agricultural Extension Service.

E. D. Alexander, extension agronomist, said that the plantings were composed of 940,000 pounds of vetch, 13,820,000 pounds of Austrian

winter peas, and 1,840,000 pounds of crimson clover seed in chaff. About 15,150,000 pounds of the total plantings were sown for soil improvement, and 1,450,000 pounds were devoted for forage in combination with small grain.

Although Georgia is not well adapted to the production of winter legume seed, farmers in 1940 saved some 95,000 pounds of vetch, 31,000 pounds of Austrian peas, and 1,460,000 pounds

of crimson clover in the chaff, to supplement the amount of seed needed for the fall planting.

Rye was sown on 92,000 acres for soil improvement and on an additional 56,000 acres for forage purposes.

Farmers manifested increased interest in pasture development, having seeded 56,000 acres to permanent pasture; and 41,000 additional acres were cleared but not sown. For temporary pastures, farmers sowed the largest acreage in history to small grain and winter legume mixtures. Total acreage of this crop was 109,000, an increase of 21 percent over 1939.

Lepedeza, another popular crop with Georgia farmers, showed progress. More than 314,000 acres were sown, and 228,000 acres were left to reseed. This is 13 percent above the previous year and 500 percent over the 1935 acreage. Farmers last year saved 2,275,000 pounds of seed from the 314,000 acres devoted to lespedeza.

Crotalaria, a summer legume used principally for soil improvement, was sown on 73,000 acres, an increase of 54 percent over the 40,000 acres planted the year before. Kudzu was planted on 9,200 acres, bringing the total acreage established to 22,000. About 6,000 acres were planted to lespedeza sericea. This amount boosts the established acreage to 12,000.

Sharp increases were noted for the small grains. Farmers sowed 20 percent more oats and about 15 percent more wheat than were planted in 1939.

Nearly 30,000 tons of superphosphate were used on soil-conserving and soil-improvement crops, and approximately 100,000 tons of limestone were applied to farm land in 1940.

Arkansas Folk Festival

The folklore of the Ozarks was expressed in an outdoor pageant held April 18 on a farm site—a natural amphitheater—on the banks of the Buffalo River near St. Joe, Ark. The festival, "My Little Cabin Home," was sponsored by the Searcy County Home Demonstration Club Council in connection with its special recreational project in folklore, which it has been studying for the last 2 years. Home demonstration and 4-H Clubs and other groups of the county assisted Home Agent Lurline Cagle and June Donahue, specialist in community activities, in putting on Searcy County's first folk festival.

Searcy County is rich in folklore. Its mountain people still sing folk songs that date back to Elizabethan days, handed down from generation to generation. Ballads dating back 400 years and coming from the most remote sections of the county were sung. Games, legends, and customs of their forefathers were brought to life by rural people and townfolk taking part in the giant outdoor festival. Practically every community took part.

Agricultural Policy and National Nutrition¹

CLAUDE R. WICKARD, Secretary of Agriculture

■ Better nutrition does not mean soft living.

It does not mean growing fat and lazy. It does not mean concentrating our attention on the fleshpots, the luxuries of life. On the contrary, it means becoming harder, more efficient, better able to work overtime whenever it is necessary, better able to do without luxuries when we have to. We do not know exactly what is ahead for us or for the world, but we do know that we are going to be called on to make sacrifices. This is all the more reason for giving attention to the whole problem of nutrition now. By applying our brains, our knowledge, and our common sense to the use of our vast resources, we can be a well-nourished and efficient people in spite of any sacrifices we may have to make.

The existing policies of the Department of Agriculture are definitely in line with a great national nutrition program such as this conference of scientists and laymen is considering. I say that knowing how much we still have to do.

Pioneers in Agriculture

The Department has done no small amount of pioneering and spadework in the field being explored by this conference. Farmers have been learning in these difficult years that when any large part of the population can afford nothing better than a poor diet, the market for agricultural products suffers accordingly. Farmers can fare well only if the Nation can eat well. This basic and simple truth has been recognized in some of the legislation passed by Congress to aid agriculture and in the programs of the Department.

From several standpoints, our present agricultural policies furnish an excellent foundation for putting this country on a better nutritional level. From the standpoint of production, it has been the national policy in the past few years to make agriculture more flexible. As a result of the long decline in foreign markets and the sharp depression of the domestic market following 1930, agriculture had to learn how to control acreage, store and hold surpluses, shift to other crops where possible, and divert products to other than the usual outlets. The alternative for farmers was a mad scramble of overproduction and soil exploitation in a desperate and vain effort to make ends meet at ruinous prices.

The collapse that would have resulted from such a scramble was forestalled by the legislation that put into effect agricultural

adjustment, the ever-normal granary, and soil conservation.

The first step, the big step, the hard step, is to achieve production adjustment on a national scale. Once this becomes a practical possibility through sufficiently widespread cooperation and adequate administrative machinery, the adjustments themselves can be made upward as well as downward according to the need. This is true of both acreage adjustments and storage. Grain stored in the ever-normal granary gives us a constant supply of food and feed that can be turned at any time into the channels of consumption to meet any emergency.

Adjustments are being made upward for some products right now, in the new agricultural policy designed to furnish food for Great Britain and to safeguard our own domestic needs. Egg production is to be increased sufficiently to supply British needs and in addition, furnish the United States with as many eggs as we ever used in the year of greatest egg consumption in the past. We hope to increase milk production enough to supply Britain's needs for milk products and, in addition, maintain our own average consumption at the level of the past 4 years. The production of canned tomatoes is to be increased by 50 percent over that of last year, and the production of all types of dried beans by 35 percent. Pork production is to be as high as possible; the spring farrowings this year are smaller than last, but the hogs are being marketed at weights above the average, and the total supply should be larger than the average of recent years.

More Food Needed

Now these are some of the very products that we would need to produce in greater abundance, according to the nutritionists, if we set out to give everyone in the United States a satisfactory diet. In order to achieve such a goal, it has been figured that we would need to consume twice as much green vegetables and fruits as we do now (such things as cabbage, green beans, apples, and so on)—70 percent more tomatoes and citrus fruits—35 percent more eggs—15 percent more butter—20 percent more milk. All of these are "protective foods," rich in minerals or vitamins, or both. I have no doubt, too, that a great many people in this country would be benefited by eating more meat than they can now afford.

My first point, then, is that so far as production is concerned existing national policy has given us a more flexible, more adjustable, less haphazard type of agriculture. We not only have the resources to produce all our

people need for better nutrition; we also have the methods. Whenever the Nation summons the will to do the job, I am sure that agriculture can meet the new demands.

I do not mean to imply, however, that there is any reason to feel smug about the adjustments agriculture has accomplished so far. We still have many problems. In particular, we still have surpluses of the three great crops produced heavily for export—wheat, cotton, and tobacco. There is no way in sight by which this country could increase its consumption of these products sufficiently to take care of the surpluses. Even a return to normal world trade would not rid us of the surplus problem with cotton and wheat. Here, then, we still need more downward adjustment. We shall have to find other uses for part of our cotton land and our wheat land. One of the best uses I can think of would be to dedicate some of this land to the products of which we do need more if we are to build up the health and strength and stamina of our people. In the South particularly, more diversification and production for home use are imperative, both for nutritional and for economic reasons.

Stamp Plan Helps

So much for production. From the standpoint of distribution, existing agricultural policies are no less in line with the goal of this conference. I would remind you that the stamp plan is agriculture's baby, and agriculture is inclined to be rather proud of it. The free-lunch program for school children and the low-cost milk-distribution program also come under agricultural policy. By this summer the stamp plan will be reaching 5 million people and distributing foods worth 10 million dollars a month; and most of these foods are the protective foods especially needed by undernourished families. The free-lunch program is reaching about 5 million school children. Low-cost milk is being distributed in six of our large cities.

These are prime examples of practical cooperative work by city people and farmers. The city people get better diets than they could otherwise afford; the farm people find a market for their products that would not otherwise exist. The method fits the purposes of this conference as a glove fits the hand. But, as you know, this distribution of surplus foods is used almost entirely to meet the needs of people on relief, and it does not nearly meet even those needs. According to the nutritional survey recently completed by the Bureau of Home Economics (and that survey, too, was one of the Department of Agriculture's babies), at least a fourth of our

¹Excerpts from address at National Nutrition Conference for Defense, May 27, 1941.

families not on relief have poor diets—most of them low-income families. At least three-fourths of us do not have really satisfactory diets. And this in spite of the fact that we are the best-fed nation in the world, with the greatest food resources and with a knowledge of nutrition as advanced as any in the world.

So far as the fourth of our people with poor diets are concerned, the trouble is very largely a matter of distribution, which in turn depends on prices, purchasing power, income.

It is the national policy that farmers shall receive enough for their products to give them a fair return; never again do we want to be faced by the specter of a ruined agriculture, with the disastrous results it would entail for all of us. Within that framework, some economies could be made by improving our mar-

keting processes. A great deal can be accomplished for the farm and village population by extending home production, home and community canning, and community refrigeration. Out in Ohio, a survey was made last year among rural families in one community to see how many of them produced enough of their own food to supply their needs. Only half of them produced enough milk for themselves; only 1 out of 10 put up enough vegetables to meet their winter needs. In fine dairy sections like New York, you find many farm families who don't keep enough milk for their own use. Why farm people should go without adequate diets when they can raise food just a few steps from their own back door is more than I can see. We can go a long way with a good home production program.

Food in the Pantry Is the First Line of Defense

■ Home-grown food stored for family use releases surplus products for Britain and the other embattled democracies. Getting ready on the home line of defense, farm families all over the United States are planting gardens and planning their pantry stores. For example, Alabama and Arkansas are building on years of successful experience in pantry-stores demonstrations which coordinate the growing of a year-round garden, saving the surplus either by canning, drying, or brining, and by storing the products in suitable pantries. Last year emphasis was placed on storage facilities. Where to store the food is of vital concern, as inadequate food-storage facilities have been a handicap to the adoption of food preservation practices by many farm families.

Last year Arkansas agents reported 222 pantry demonstrations involving 677 farm families, and 121 demonstrations were established in 67 Alabama counties with 115 of the demonstrators completing roomy pantries with well-arranged shelves stocked with foods from the year-round garden. Negro pantry-stores demonstrations were established in every Alabama county having a Negro home demonstration agent, and 40 pantry demonstrations were carried out.

Food-storage facilities of some 1,900 Arkansas farm families cooperating in the food-storage program ranged from shelves across one end of the kitchen for canned and dried foods to storage houses which provided the safekeeping of cured meats and fresh and preserved fruits and vegetables. The costs ranged from 25 cents to \$150.

Plans have been devised for a movable storage cupboard for tenant families. Some

of the farmers have built underground cellar-like storage houses of native stone and scrap lumber at very little cost. A family in Montgomery County, Ark., hired all the labor and built a cellar for \$65. A cellar built of concrete near a farm home in Conway County, Ala., cost only \$26. A peep inside the cellar reveals an array of canned foods to tempt any appetite. The homemaker has more than 800 quarts of food canned for her family of five. A farm family in Sevier County, Ark., is making their storage house pay for itself. Their storage house, valued at \$100 and built for \$15 is used not only for the storage of their own vegetables, but space is rented to the neighbors. Last year they stored 100 bushels of potatoes for neighbors, charging 10 cents per bushel.

Already the pantry-stores project has been the means of increasing the number of people canning on a budget basis and improving the standard of their home-canned products. A Marshall County, Ala., demonstrator has a record of more than 200 different people who have visited her pantry stores and have become interested in planning similar food-storage space in their own homes.

As a result of the open house held at the home of one of the demonstrators in Limestone County, Ala., the women gained so much inspiration and help from seeing the fine display of more than 900 quarts of food canned and placed on the newly built shelves of the remodeled storehouse that several of them followed the same plan. With the slogan, "Grow all you can and can all you can," Limestone County homemakers were waging an extensive food campaign, following a survey made by the live-at-home chairmen

in each home demonstration club. This survey showed that half of the farm families had spring gardens only, one-fourth of the families did not even grow a good spring garden, and only half of the vegetables and fruits needed for good health had been canned. Four pantry-stores demonstrations in the county did much to stimulate interest in conserving and storing home-produced food. Nearly \$70,000 worth of fruits, vegetables, and meat were conserved by the women and 4-H Club girls in Limestone County last year—three times as much as the year before.

The women demonstrating their pantries reported many benefits from their work. "I found myself studying about foods so that I could answer questions," said one of the Choctaw County, Ala., demonstrators. "I feel that I know twice as much now as before starting the pantry demonstration. You can't imagine the questions the visitors ask me. They want to know why I used certain methods and why I selected certain vegetables for canning. I always point out that the quality of the foods is important to preserve the food value and flavor. For my demonstration, I canned 505 quarts including tomatoes, leafy green and miscellaneous vegetables, and fruits and meats."

Another Alabama homemaker reports, "During the year 1940, under the guidance of our home agent, I canned, according to extension methods, 672 jars of the following home-produced foods: vegetables, fruits, fruit juices, pickles, jams, jellies, and meats. In order for me to have fresh vegetables for my table and to can, it was necessary for me to have not only a 'spring garden' but to plant 3 to 5 vegetables every month in the year. Every farm family should grow 4 or 5 'spring gardens' every year. I use a steam-pressure cooker for canning acid vegetables and meats. This lessens the cooking time and is a surer method. I use tin cans for all my meats and most of my vegetables. I like to can in tins as I can regulate the cooking more accurately and have less shrinkage. I do not find the tin can any more expensive than the glass jar when considering the time saved and the breakage of glass jars.

"From my pantry I expect to serve my family of three, two or three vegetables a day during the season when fresh vegetables are not available. Across one end of my kitchen I have built a storage pantry for my canned products with shelves as high as I can reach. I find this is much more convenient than storing them in boxes in the back hall or on the back porch, as I previously did.

"More than 72 of my neighbors and friends have visited my home to see my canned products. I have also passed on such information as I had as to grading vegetables and handling of meats for canning. I am very proud of my storage pantry and expect to serve my family good, well-balanced meals. I have no fear when company drops in just at mealtime, for I have a variety of food on my shelves."

Nutrition in Four Letters

What are the vital aspects of nutrition in relation to an unlimited national emergency? How can nutrition facts be translated into simple terms of food—the right food for all the people? These and other significant questions were studied by 900 nationally known nutritionists, doctors, dentists, social workers, extension workers, teachers, representatives of consumer groups, labor unions, and other interested groups at the National Nutrition Conference for Defense, May 26, 27, and 28, with Director of Extension M. L. Wilson serving as chairman of the advisory committee. Many significant statements and recommendations were made, among which are the following:

■ "Don't forget that for a very significant part of our population nutrition is not a nine-letter word emblazoned with men in white rampant upon a field of vitamins. It is a four-letter word—food—good food and plenty of it."—*Paul V. McNutt, Federal Security Administrator, Coordinator of Health, Welfare and Related Defense, and Chairman of the National Nutrition Conference for Defense.*

The Challenge

In recent years scientists have made outstanding discoveries as to the amounts and kinds of foods needed for maximum health and vigor. Yet every survey of nutrition, by whatever methods conducted, shows that here in the United States undernourishment is widespread and serious. The Department of Agriculture has estimated that many millions of men, women, and children do not get the foods which science considers essential. We do not lack and we will not lack the means of producing food in abundance and variety. Our task is to translate this abundance into reality for every American family.—*Franklin D. Roosevelt, President.*

Health Plus

Food is fundamental to the defense of the United States. If workers and management have abundant food and the right attitude, they will turn out the vast quantities of defense materials which are necessary to save us from world chaos. * * * Whether it be children, whether it be workers, whether it be soldiers, the first step toward a happy, confident attitude is an abundant supply of the right kind of food. On a foundation of good food we can build almost anything. Without it we can build nothing. * * * Probably a larger number of people today are being fed properly in the United States than ever before in our history, but we have just started to do a real job. We want to see that good food gives "health-plus" not merely

to 10 percent of our people but to everyone.

We must shift our agriculture more and more toward producing those foods which are rich in vitamins, minerals, and the right kind of proteins. We have started producing more of these foods, such as milk, eggs, tomatoes, dried beans, pork, etc., so that we may have an abundance, not only for ourselves but for Britain, to meet every possible kind of contingency. We are using the cow, the hen, and the pig to extract from our huge supplies of corn stored in the ever-normal granary the vitamin B, the vitamin A, the good minerals, and the proteins which will furnish the nervous energy to drive us through to victory.—*Henry A. Wallace, Vice President.*

Importance of Food Habits

In developing an educational program for improving nutrition, it is important to keep in mind the importance of custom in our food habits. The Labor Department's recent studies of food consumption show the remarkable persistence of the food preferences of earlier generations in the localities studied. The tables of New Orleans still remind one of the fish, the chicken, the salads, and the greens of the French; the Bostonians still eat more beans and drink more tea than families in most other cities. In Cleveland and Milwaukee they eat more rye bread and cheese and apples and coffee. We Americans have our private ideas about good food. It is lucky for the farmers that we do like a little variety, and all these preferences must be taken into account in any program which attempts to bring diets to a point where they will adequately provide for growth and health. A national nutrition policy should plan to change food-consumption habits only insofar as it is absolutely necessary to do so to provide all the nutrients necessary for health efficiency and the full enjoyment of life.—*Frances Perkins, Secretary of Labor.*

Selectees Show Health Defects

Out of a million men examined by Selective Service local medical examiners and about 560,000 men examined by the Army Medical Board, a total of 380,000 have been found unfit for general military service under present standards. What have been the causes for rejecting these individuals? There are many, and I shall name the few which account for the largest number.

Teeth account for nearly 20 percent of the rejections; eyes and cardio-vascular 10 percent each; 9 percent are rejected as being generally disabled for three or more reasons; musculoskeletal disabilities account for 8 percent; 7 percent are obviously unfit even to the nonprofessional; nervous and mental rejections take 6 percent; ear, nose, and throat fail 5 percent; lungs, hernia, and those over or under weight each reject 4 percent; gonorrhea and syphilis take out 3.5 percent, and feet 3 percent.

It is not my purpose to attempt to fix the causes for these disabilities. Many suggestions are advanced. Foods undoubtedly play a very considerable part whether it be because of a lack of a proper amount or because the food was of an improper kind. It has been estimated that perhaps one-third of the rejections were due either directly or indirectly to nutritional deficiencies. In terms of men, the Army today has been deprived of 150,000 men who should be able to do duty as soldiers. This is 15 percent of the total number which have been physically examined by the Selective Service System.

It is perhaps of little use to speculate on what should have been done by our schools, by parents, by health bodies, or by the Government. Probably the depression years left their marks. Undoubtedly the automobile and the cash it required for monthly payments and for gas, oil, and tires, has cost us as a people in physical fitness. Whatever the causes, this is the condition in which we find ourselves. Whether we are worse off physically than we were in 1917-18 is undoubtedly controversial. That our physical standards are higher now, let us admit. The fact remains that although we may be no worse now than 24 years ago, we certainly seem to be no better. Better or worse or the same, we are physically in a condition of which we nationally should be thoroughly ashamed. It is a condition which we should recognize as dangerous and which we should take immediate, positive, and vigorous measures to correct. * * *

Undoubtedly prevention is always better than cure. Far-reaching results will follow basic changes which develop our people physically. This is a long-range program in which schools, parents, and Government must each bear a part. To be successful, there must be a thoroughgoing system of education as to what the situation is, what steps are necessary for its correction, and the individual part that each citizen must play in making

these measures operative.—*Brig. Gen. Lewis B. Hershey, Deputy Director, National Headquarters, Selective Service System.*

Food Distribution

The food stamp plan of the Surplus Marketing Administration has succeeded amazingly. I was told by a physician in New York that the clinical complexion of the clientele in a large dispensary changed dramatically after the food stamp plan was introduced in that community. Before its adoption, almost every patient was overweight or underweight. (And I may say that overweight is as common a symptom of malnutrition as is underweight.) Many of the patients also presented other signs of malnutrition. After the adoption of the stamp plan, the appearance of more than half the patients decidedly improved. Indeed, one of the women patients declared, "Doctor, I'm beginning to live again!"

Another way of supplementing the diets of low-income families is to distribute food in kind. This can be done by some arrangement for communal feeding. The school-lunch program, so long in operation in this country, has proved its value. Sir John Orr, director of the Rowell Research Institute in Aberdeen, and director of the Imperial Bureau of Animal Nutrition, recently wrote from England that when the school-day diets of malnourished children were supplemented with milk and other protective foods, their ability to learn markedly improved. In a private school in Connecticut, where malnutrition had not been conspicuous before, the average grades rose 10 percent when special attention was given to the nutritional adequacy of the food served.—*Russell M. Wilder, M. D., professor of medicine, The Mayo Foundation, Rochester, Minn.; chairman, Committee on Food and Nutrition, National Research Council, Washington, D. C.*

Excerpts From Declaration of Policy Adopted by Conference

The newer knowledge of nutrition should be used not only for the benefit of our armed forces who must, of course, be adequately fed, but for that of all workers in industries directly and indirectly related to defense and also for the civilian population as a whole.

Few problems in the field of public health are simple, and that of undernourishment is particularly complex. It has not only medical but social, economic, and psychological aspects, and to attack it on a national scale will require particularly widespread and wholehearted cooperation on the part of all elements in our population. The conference urges the following lines of attack as particularly important:

The use of the recommended allowances of calories, protein, and certain important minerals and vitamins, prepared by the Committee on Food and Nutrition of the National Research Council, both as the general goal



Three of the principals at the National Nutrition Conference: Paul V. McNutt (left), chairman of the conference, shakes hands with M. L. Wilson, Director of Extension Work and chairman of the advisory committee, and Dr. Russell M. Wilder (right), of the Mayo Foundation and the National Research Council.

for good nutrition in the United States and as the yardstick by which to measure progress toward that goal.

Translation of these allowances and other similar technical material into terms of everyday foods and appetizing meals suitable for families and individuals at different economic levels in such a way that the newer knowledge of nutrition can be applied simply and practically in every home and in accordance with the food preferences of the family. * * *

The mobilization of every educational method to spread the newer knowledge of nutrition among laymen by means of schools, motion pictures, the radio, the public press, home and community demonstrations, and all other suitable means.

Mobilization of all neighborhood, community, State and national organizations and services that can contribute in any way to raising the nutritional level of the people of the United States.

Full use of any practical devices, such as the so-called stamp plan, free school lunches, and low-cost milk distribution, which will bring nourishing, adequate meals to those who could not otherwise afford them, and at the same time help to distribute food surpluses at a fair return to the farmer.

Efforts to improve food distribution, including processing, marketing, packaging, and labeling, to bring about greater real economies to the consumer.

Encouragement in all practical ways of greater production by agriculture of the foods needed in more abundance, according to the

newer knowledge of nutrition, in the average American diet.

Equally, encouragement in every practical way of more production for home use by rural people, especially those at low-income levels.

Excerpts From Recommendations Offered by Conference Sections

Methods of Education

A truly effective nutrition program will:

- reach the whole population—all groups, all races, both sexes, all creeds, all ages.
- recognize motives for action and include suggestions on what to do and how to do it.
- develop qualified leadership.
- drive home the same ideas many times and in many ways.
- employ every suitable educational tool available, or that can be developed on National, State, and community levels.
- adapt those tools to the many and varied groups to be reached and use them with intelligence and skill.
- consider all phases of individual, family, and group situations that have a bearing upon ability to produce, buy, prepare, conserve, and consume food.
- afford opportunity for participation in making, putting into effect, and evaluating local nutrition programs.

- enlist the fullest participation of all citizens and work through every possible channel to reach the people.
- be adequately financed. * * *

Studies should be made concerning the degree to which various racial and cultural food patterns may need supplementing in order to make them nutritionally adequate.

To be well fed, people have to know what foods they need every day, how to combine these foods into meals, how to check meals against standards. To provide meals for a family, they need to know how to buy and prepare food. Many rural and urban families need to produce more or less of their food supply and to understand production techniques. Farm families need to make the production of family food a part of their yearly farm-management plan.

Only when paralleled by appropriate education, will the various action programs for the wider distribution of food make their full contribution to community betterment.

If we are to succeed in this giant task of education, we shall have to use our ingenuity and inventiveness in providing the tools and materials that make ideas have interest and meaning and help people to take wise action. We have many such tools at our disposal now. We need to know where they are, how good they are, how to get them, and how to use them. A system of clearing houses should be set up immediately for widest possible dissemination of such information. But we also need many more tools and materials than we now have; and we need desperately to create new, vital, lively ways of using them.—*From Recommendations—Section on Methods of Education in Nutrition. Chairman, G. Dorothy Williams; cochairman, Mildred W. Wood; secretaries, Miriam Birdseye and Edna P. Amidon.*

Distribution

The first essential for a well-fed nation is a supply of food large enough to give everyone an adequate diet. To this end, we believe that agricultural production should be adjusted to provide adequate supplies of those foods in which the American diet is deficient, and away from those crops for which the export market has for the time being been curtailed. In order to attain this, it is necessary that farmers get fair prices and fair incomes as these adjustments are made.

A second essential to improved nutrition among low-income families is greater efficiency in the transportation, processing, and distribution of food products. We recognize that the food industry has already made much progress in this direction. For those low-income families who can afford only a minimum of services, we would urge further development of economical retailing adapted to low-income consumer requirements, improvements in terminal market facilities, cheaper food forms, and the most economical packaging. * * *

The Government and other official agencies carrying on educational campaigns should em-

phasize the nutritional importance of ordinary foods.

The Government and other official agencies should assume and accentuate further responsibilities in educating consumers as to their nutritional requirements and to the manner in which processed foods can help to meet these requirements. * * *

Even with the wisest possible adjustment on the farm and in the marketing system, it would not be possible to provide under present income levels adequate diets for low-income families without some form of government aid.

Very substantial progress has been made in this field in recent years by the development of the food-stamp plan, the school-lunch program, low-cost milk schemes, and similar methods of enabling low-income consumers to buy greater quantities of foods needed in the diet. We urge that programs of this kind be extended as rapidly as possible to all needy families in the United States and that these programs be used to help move the increased supply of food recommended above.

We urge that these programs be kept flexible and that continued experiments be made in order that they may be adjusted to give maximum benefits to low-income families and to the farmer.—*From Report and Recommendations—Section, Nutrition Problems in Distribution and Processing of Foods. Chairman, Hector Lazo; cochairman, L. V. Burton; secretaries, Frederick V. Waugh and R. S. Hollingshead.*

Economic Policy and Social Responsibility

To combat malnutrition there must be increased production and consumption of the foods that are rich in those nutrients now consumed in less than adequate quantities. For some population groups this means more of all kinds of foods; for most groups it means more of those foods that are good sources of the minerals and vitamins most likely to be deficient in diets in this country.

The problem of nutrition is always important. The need for solution becomes apparent and crucial in times of national emergency. An adequate plane of living is basic to the defense and maintenance of democratic institutions. To achieve this end, cooperation must be enlisted of all groups in the Nation and community: Federal, State, and local governments, civic, business, professional, labor, and farm groups. * * *

Programs for increasing farm incomes should emphasize raising the incomes of the families at the lower economic levels. Increased opportunities should also be provided for supplementary earnings by farm workers with proper safeguards for labor standards.

Although farm families tend to have better diets than other occupational groups, there is nevertheless considerable malnutrition among persons living on farms. The programs for increasing production of foods needed for home use of the Extension Service, Farm Security Administration, and other groups

should be maintained and extended. * * *

We believe it is essential to increase the supply of foods and nutrients, and to accomplish this we recommend:

That the Government and industry, including agriculture, should give increased attention to trends in consumer demand and to the supply of foods needed to insure an adequate diet for all families. Government programs should continue to minimize disorganization in agriculture and, at the same time, seek to eliminate idle resources. From time to time the Federal Government may find it necessary to put a floor under the wholesale price of some foods in order to get necessary expansion. It is recognized that the program of desired expansion may necessitate the Government's subsidizing either consumption or production or both.

That surpluses on hand, including so-called unmarketable grades or sizes of fruits and vegetables, should be saved for consumption by suitable processing or distribution in fresh form, by means of Government subsidies if necessary.

That the Government should take the initiative in encouraging industry to bring on the market low-cost, highly nutritious foods in forms acceptable to consumers, such as soybean, peanut, and milk products. No milk nutrients should be wasted. Skim-milk products, dry and fluid, are vitally needed and should be put on the market at low price.

We recommend that dietary essentials be obtained from properly planned meals of natural food materials. Fortification of foods with minerals and vitamins should be undertaken only to the extent that scientific research indicates that such practice is in the public interest and provides an economical method of improving nutrition. * * *

Education for home food production among rural people must deal with the following aspects of the program:

1. Improvement of soils in certain areas where diversified production is now unsuccessful.

2. Seeds and cultivation practices adapted to local conditions.

3. Landlord-tenant relationships that encourage home food production among tenants.

4. Planning for suitable home food production not as a side line but as an important farm enterprise.

5. Provision of more adequate community facilities for processing and conserving foods, such as community-owned and cooperatively owned cold-storage and freezer lockers, canning centers, drying ovens, curing houses, etc.—*From recommendations of Section on Economic Policy and Social Responsibility as Related to Nutrition. Chairman, Lucy Gillett; cochairman, Hazel Kyrk; secretary, Hazel K. Sticbeling.*

■ About 42,000 of the 65,000 farms in Oregon have electric service. Approximately 4,700 have been added by the 8 REA-financed systems.

Family Food Program Through Visual Aids

HOWARD KNAUS, in Charge of Visual Aids, Minnesota Agricultural Extension Service

■ When it became evident early this spring that the family food supply must be given major emphasis by extension workers, Director Paul E. Miller of the Minnesota Agricultural Extension Service set up a group of committees to rush material to county extension workers. He appointed S. B. Cleland, farm management specialist, as general chairman to coordinate the work of committees on county organization, nutrition, vegetables and fruits, 4-H cooperation, and visual aids and information.

Quick action on all fronts of the food-for-defense program demanded that the visual aids and information offices, supervised by H. L. Harris, extension editor, play a leading role.

The word "go" was given on all requests for bulletins, folders, posters, and visual aids that furthered the food program. Each job was accorded No. 1 preference in office handling.

As the family food supply and adequate nutrition are the important goals of this vast program, the first duty was to supply basic material on both. A check of United States Department of Agriculture materials available revealed a number of useful items, including Film Strip No. 347, *Selecting Foods for Good Nutrition*. This strip, showing the effects of vitamins on rats, was immediately recommended for use in counties.

To supplement this material, we designed a set of food-value slides, using material prepared by the nutrition staff. This set is made up of Kodachromes of the common foods interspersed with black-and-white chart slides showing quantities of 9 food elements in each serving, related to the daily needs of 1 person. As no less than 27 separate foods and complete meals were thus treated, it was necessary, for production purposes, to devise an adjustable chart to photograph. This was done by making a master chart with adjustable bars and hand-lettering a significant statement for each food. This plan worked out very well, and production was materially hastened. This set of 48 slides is now available for loan or sale to county extension agents in Minnesota.

Another aid in presenting the story of good nutrition took the form of a lecture chart, presenting five leading vitamins, A, B₁, B₂, or G, C, and D, with information on effects on the body and listing of common home-grown foods which are the best sources.

In order to make these lecture charts more effective, they were backed by 50,000 4- by 6-inch "kitchen cards" bearing the same information. These vitamin cards are on light cardboard with hole punched to hang in the kitchen for reference. They were given wide

distribution at meetings, together with two folders, *Tomatoes*, Minnesota's Health Food, and *The Food We Eat*, which were rushed into print in April and May.

The nutrition information is being carried further by another set of Kodachrome slides on school lunches which will be ready for use this month. This series explains the value of hot lunches, methods of serving in both small and large schools, and utilization of surplus commodity and WPA garden and canning helps.

Other slide series are preaching the gospel of abundant food supplies. Available for loan to agents are *Vegetables and the Consumer*, *Raising a Garden*, and *Vegetables Everyone Can Grow*. These series are being strengthened for next year by addition of good Kodachromes taken this summer.

Forty sets of *Raising a Garden* were prepared early in May. The entire lot was snapped up by county agents 2 days after they were announced. This is another indication of the eagerness of county workers for material to help put this program across. To meet this need, the Minnesota office has adopted the practice of rushing material out to counties as quickly as possible. If necessary, the series can be improved later. The important thing now is to get the working material out at once.

Kodachrome for Defense

When the call came for full speed ahead on food for defense, it was possible in Minnesota to make use of a marked development in visual aids, especially in the use of Kodachromes. In the past 2 years, thousands of colored slides have been made available to county extension offices, and the use of Kodachromes has increased until 50 projectors are kept busy telling the extension story all over the State. With the Minnesota Extension Service, the trend in visual aids has been strongly in the direction of color. Not only are specialists carrying their colored-slide series with them on their trips about the State, but county extension agents are also acquiring projectors and cameras as regular office equipment and ordering duplicates of slide series for their own use. Some of the county extension agents have gone so far as to prepare useful series of their own.

Eighty sets of slides representing different phases of the extension program have been prepared at University Farm. The number of slides per set varies from 20 to 40. Sets are available for use of specialists and agents, with a standing invitation to county extension agents to order duplicates for their own

files. Duplicates are supplied to the agents at cost. So far, 14 counties have acquired a full set of pasture slides, 10 counties a full set of crop slides, 15 other counties a full set of farm-management slides, and 20 now have garden sets.

Subject-matter series which have been prepared represent such topics as the following: Operation of a bull association, livestock judging, sheep on Minnesota farms, raspberry culture, woodlot management, weed control, operation of the State seed testing laboratory, tree planting, pasture management and pasture grasses, Minnesota grain crops, farm-management charts, uses for a 1/4-horsepower electric motor, hybrid corn, wind-erosion control, saw-mill operation in connection with farm woodlots, turkey management, vegetable market and the consumer, 4-H booths, 4-H demonstrations, hobbies, home beautification, refinishing of furniture, potato diseases, and potato production.

Projection equipment in the State office consists of 11 film-strip and slide projectors and 7 projection screens. A recent survey of camera and projection equipment available for use of agents in the counties shows 39 cameras, 46 slide projectors, 42 screens, 11 sound-movie projectors, and 9 silent-movie projectors.

One of the problems uppermost in preparing subject-matter series which tell a well-integrated and effective story has been to eliminate wasted effort and material. H. L. Harris and E. A. Hanson, chairman of a special visual-aids committee set up in the Extension Service, found out early in the organization of the visual-aids work that it is too easy for specialists to request colored pictures at random. This tendency was counteracted by insisting that each series be mapped carefully before pictures are taken. When each Kodachrome is planned to drive home an idea, the colored-slide series tells a much more effective story than is the case when pictures are picked up at random and then thrown together.

Although the spotlight is on Kodachromes at Minnesota, the visual-aids section continues its large output of lecture charts, posters, and chart material to be turned into slides and newspaper mats. A recently acquired speed graphic news camera is utilized by press, visual-aids, and bulletin sections to build up a file of pictures taken in the field.

All these facilities are now working overtime on family food and food for defense. They were important in enabling the Minnesota Agricultural Extension Service to get an early start in the program, and they are adding to the effectiveness of the program as it progresses.

Moving Pictures Widen the Scope

G. T. KLEIN, Extension Poultry Husbandman, Massachusetts



New Visual Specialist

Don Bennett has been appointed extension visual specialist with the Federal Extension Service.

Mr. Bennett's experience includes work with several visual production and advertising agencies, teaching photography at the New York Institute of Photography for 4 years, directing motion pictures in the Motion Picture Section of the Department of Agriculture for 4 years, and editing Photonews, a weekly magazine for amateur photographers, for a year.

While with the Motion Picture Section, Mr. Bennett directed the international prize-winning picture, *Poultry—A Billion Dollar Industry*, which won the first award at Rome, Italy, in 1940 at the International Institute of Agriculture and which was adjudged the best educational film of the year.

He is also a director of the Photographic Society of America, an organizer and leader in the Washington Camera Council, and is in closest contact with the newer commercial developments in the photographic and visual teaching fields.

Mr. Bennett's services will be available to State extension workers through extension editors and visual specialists in developing State visual programs, holding training schools in local production and use of visual material, and ascertaining field needs for visual aids.

■ Because of the expanding use of 2- by 2-inch color slides among extension field workers, the Visual Instruction Section has prepared a semitechnical bulletin on the preparation of monochrome slides bearing graphs, charts, titles, and similar matter. Full directions for the photographing and duplication of such slides are included. Ask for Titles and Graphs for Color-Slide Series.

■ Through movies we can meet with thousands of people who have little contact with extension work. These people are interested in agriculture in a passing way and are eager to know more about it, but whatever information they receive must be presented in a simple and pleasing way. We can at the same time assist commodity groups in presenting to the public facts about their products. We can help to promote them; and, if we are a bit careful in planning the movies, we can include subject matter very helpful to producers.

For 5 years or more we have given considerable attention to the production of movies here at Massachusetts State College. Our first efforts were in black and white; but, with the improvement of color film and some slight reduction in cost, we now use color film exclusively. The movies are not more than 30 minutes in length, and we prefer to hold them to 800 feet or 25 minutes showing time. They always carry sufficient titles so that one from the college need not accompany them. All films on poultry subjects are on 16-millimeter silent stock.

The films cover such subjects as eggs in *Give the Fresh Eggs a Break*; poultry meat, *Your Chicken Dinner in the Making*; turkeys, *Tom Turkey Tells His Story*; ducks, *Bay State Ducklings*; and subject-matter films such as *Applied Poultry Breeding and Poultry Housing and Equipment*.

We make an effort to tell briefly the story of the production of the product in Massachusetts. This is followed by the marketing of the product and ways of using it. Woven into the story are bits of fall color or historical background that is pertinent to the subject. In the film of *Tom Turkey Tells His Story* there was an excellent chance to review the first Thanksgiving held in Plymouth Colony as a setting for the picture.

A new film is planned a year ahead of time, and as I travel about the State on regular work, shots that can be used to tell some phase of the story are photographed. For difficult work, Prof. Rollin H. Barrett accompanies me and uses the more expensive equipment owned by the college. Professor Barrett is in our farm management department but has had wide experience with movies, and his farm management training is very helpful. When all the photographic work is completed, the scenes are reviewed, listed, and suitable titles written. These are made in Boston, and we work them into our movie at the proper place.

The cost of titles and film does not exceed \$100 for a movie. Often there are groups such as the New England Fresh Egg Institute that have copies made at a cost of

10 cents a foot. Although a large part of the funds are from the Extension Service, the State department of agriculture has assisted in financing some movies; and funds from the World's Poultry Congress activities as well as contributions from State commodity groups have gone into the production of some films.

The audience for our films is a rather comprehensive group. Our State is highly organized with county poultry associations and a State Federation of Poultry Associations. New films are quickly booked by these organizations and schools, granges, farmers' clubs, and women's clubs.

A film in the hands of the extension secretary at the college and a copy in the hands of the New England Fresh Egg Institute will be used about 100 times during the first year and before a total of 10,000 persons. It has been difficult to book the films for use in the various counties more frequently than an average of once a week. Though we have no department of visual education, the films are checked by the Extension Service after each showing. Breaks are repaired, and moisture is added when the film becomes too dry. We have freely lent our films to other States when they were requested on dates not in use here.

4-H Marketing Day

Eugene, Oreg., gave a royal welcome to more than 600 4-H boys and girls attending their 1941 marketing day festivities. The city was theirs for the day. They toured Eugene's packing plants, marketing establishments, and flour mills; were guests at a theater party; visited a newspaper office while the presses were rolling, and attended a mock trial in the circuit court room. They learned how flour sacks are sewn at a mill and elevator company; they learned about the city's water system, saw how eggs are dipped at a poultry producer's plant, and watched a butter maker in action at the farmers' creamery.

This marketing tour has been arranged annually for a number of years by County Club Agent R. C. Kuehner for the boys and girls who have written essays on marketing. The best essays of five boys and five girls were announced at the theater on the day of the tour.

■ Last year, 890 Colorado 4-H forestry club members received 22,250 trees which they planted around farm homes for erosion-control purposes or as replacements in existing shelterbelts.

Have You Read?

Rain or Shine—The Story of Weather, by Marian E. Baer. 292 pp. New York, N. Y. Toronto, Canada. Farrar & Rinehart, Inc.

■ What is the first thing you think of in the morning and the last thing at night?—not pie, nor cake, nor candy, but the weather. Weather is always with us, sometimes as a friend, sometimes as a foe. It does so many kinds of interesting things that even the weatherman, who is supposed to know, is baffled. The story of the weather—*Rain or Shine*, by Marian E. Baer—is a fascinating one. The reader feels the thrill of the explorer, the geologist, the chemist, the physicist, the archeologist, as each scientist reveals most amazing secrets about Mr. Weather. Questions that “stumped” the teacher are answered interestingly here: Where does the weather come from? What plays the leading role in weather making? What causes thunder and lightning? and even, How high is the sky? *Rain or Shine* not only will help you to get along with the weather but also with the weatherman.—*Jean Shippey, National 4-H Fellow, 1940.*

Leaders for Adult Education, by Harry A. Overstreet and Bonaro W. Overstreet. 202 pp. New York, N. Y. George Grady Press. 1941.

“*Leaders for Adult Education*” presents two phases of the field of adult education. One section of the book is concerned with qualifications for adult educators. The other section presents a panorama of typical phases of adult education and of methods of training for this field. There is ample use of case study material.

The authors define educators in a democracy as, “those deliberately trained leaders to whom society entrusts the task of harmonizing individual rights with social rights, progress with stability” . . . They believe that educators “help to keep society on an even keel.” The

authors state “a leader is one person who counts as more than one. The effects of his outlook and behaviors is multiplied in all who adopt his way of looking at things. Clearly then no society can remain indifferent to the methods and motives of its leaders.”

An outstanding conviction of the authors appears to be that the adult education leader must be a constant learner, must have specialized knowledge, effective methods of putting that knowledge at the disposal of the adult population, and must also be an intelligent generalist in order to show effectively the relationship between what is taught and the daily life of the adults being taught.

The book includes suggested standards for what the adult educator should be and should know, and certain basic purposes which should obtain in teaching adults. It states that the adult educator must be “a person among people” rather than an exalted authority set apart. Consideration is given to the importance of lay leadership and to discussion groups.

Under the title “*Training for Rural Adult Education*” the authors discuss the Extension Service as “the most extensive enterprise in adult education in America.” They indicate that some people in urban areas fail to think of extension work as adult education, but the authors state “the work of thousands of county agents, agricultural extension lecturers, and home demonstration agents satisfies every test we put to adult education. These teachers have gone forth to meet adults on the level of their felt wants and needs. They have had to adjust their teaching not only to the interests and capacities of their people, but to their life conditions. Rural life in its many sided character presents an opportunity for the most intelligent kind of leadership in adult education.”

This book provides ample material for critical self analysis by persons engaged in any field of adult education.—*Grace E. Frysinger, Senior Home Economist.*

meeting of the rural teachers and school boards. Two teachers gave their personal experiences regarding the hot school lunch. The home agent distributed recipes for good sandwiches and one hot dish, which can easily be prepared in the rural schools.

Work done by all agencies represented on the nutrition committee included meal planning, school lunch, corrective feeding for children, use of milk and milk products, better gardens, food preservation, health clinics, and home health and sanitation.

During the year 180 families budgeted food expenditures, 150 followed food-buying recommendations, 150 served better balanced meals, 55 schools followed recommendations for a hot dish or school lunch to 472 children, 20 families followed recommended methods for child feeding, and 25 individuals adopted recommendations for corrective feeding; 250 families were given information on the use of milk and milk products, and 75 followed recommendations for the control of insects and disease in their gardens.

Marketing recommendations were followed by 50 families, and timely economic information was used in 175 homes as a basis for readjusting enterprise.

In the food-preservation project 150 families (not including 4-H Club members) were assisted in canning or otherwise preserving 12,500 quarts of fruits, vegetables, and meats; and 10,000 containers of jam, jelly, or other products. The estimated value of products canned or preserved was \$5,100.

In 1940, 120 children were examined at 6 preschool health clinics, and 182 4-H Club members at 2 clinics; 751 grade school children were also examined.

Forty-four individuals improved health habits, 320 adopted recommended preventive measures to improve health, 44 improved posture; and 363 families adopted better home-nursing procedure. As a result of the health and sanitation program 1,700 individuals improved their health; 13 communities were assisted in improving hygienic or public welfare practices; and 40 families were aided in obtaining assistance for X-rays, glasses, and cod-liver oil from the Red Cross or other relief agencies.

County Nutrition Committee Functions

■ Mrs. Bessie Joyner, home demonstration agent for Brown County, S. Dak., reports that there has been an active nutrition committee in Brown County since 1936. The county nutrition committee is composed of the home demonstration agent, the home management supervisor of the Farm Security Administration, homemaking teachers, the county nurse, and the county superintendent of schools. The committee will be enlarged in 1941 to include other interested groups. For the first 3 years, monthly meetings were held by the committee; but it was decided to hold four meetings in 1940 and to have each

agency represented give one radio program and outline the work it was best fitted to carry on during the year. The accomplishments of each agency were to be pooled for the summary report.

“*Nutrition to Improve Health*” was the slogan for 1940, and the committee decided to go on record as favoring 100-percent participation of rural schools in the hot-lunch program and as promoting better nutrition for all school children and especially for rural families.

The home agent gave a talk on nutrition on behalf of the nutrition committee at the

■ To aid Kansas people in keeping themselves nutritionally sound, a new leaflet, *Food for Fitness*, has been prepared by the Kansas State College Extension Service at the request of the State committee on human nutrition in relation to national defense.

Suggestions for a program on nutrition, to be carried out by women's organizations throughout the State, are contained in the brochure. Discussion questions, facts about the nutritional status of Kansas, and suggestions for improving the health of the public by improving eating habits are outlined. There is a food score card—a practical and easy means of checking the adequacy of the daily food.

Insect Control on Indiana Farms

Indiana Extension Service Circular 2, Extension Entomology: A Study of Methods and Results, by G. E. Lehker, entomology specialist, and L. M. Busche, assistant county agent leader, reports information obtained from 2,575 farms in 85 Indiana counties on insect control practices followed, types of insecticide used, and sources of information that influenced the adoption of practices.

Approximately 86 percent of the Indiana farmers had applied some treatment for insect control. More than 70 percent had no equipment adequate for dusting plants. Half of them lacked satisfactory sprayers and 38 percent had neither suitable sprayers nor dusters.

The dealer was credited with influencing 25 percent of the practices used to control insects; neighbors or friends, 19 percent; "home remedies," 17 percent; direct extension sources, 16 percent, with another 13 percent from sources which were primarily extension; and other sources, 10 percent. When practices had been used for so many years that no definite source could be given they were frequently reported under "home remedies."

Who Are the 4-H Leaders?

Six studies of 4-H leadership made in the last 5 years include records obtained by personal contact from more than 2,500 volunteer leaders in 12 States. Twenty-nine percent of the leaders were farm homemakers; 17 percent, farmers; 9 percent, young people helping on the parental farm or home; 13 percent older boys and girls still in school; 18 percent school teachers; 9 percent nonfarm homemakers; and 5 percent in other occupations.

Except for the "junior leaders" who are still 4-H members, the leadership for 4-H Club work tends to come from two age groups. First, there are those just beyond 4-H age, many of whom are former 4-H members, and second, there are the parents of 4-H members.

One-fifth of the volunteer local leaders have had only elementary school training; one-third, had college training; and the remainder have graduated from high school or had some high school training.

Neither the age of leaders nor the years of schooling they have completed has an important relation to the quality of work done by 4-H Clubs, as measured by percentages of completion or reenrollment. As a group, the leaders with only elementary school training were as effective as those with college training.

4-H leaders are usually active in other community organizations, particularly the church. After becoming leaders in 4-H Club work, they tend to assume even more leadership than previously in other organizations.

EXTENSION RESEARCH

Studying Our Job of
Extension Teaching

The recently published report, Volunteer Leaders Are Essential to the 4-H Program, Extension Service Circular 347, includes data about the activities of 1,056 leaders in Kansas, Minnesota, Missouri, and Wisconsin.

Prefer 4-H Broadcasters

4-H Club members like to hear people they know in 4-H broadcasts. In the counties having county 4-H radio programs the boys and girls listened more regularly to these broadcasts than to the State and National 4-H programs. This was brought out in the study, Use of Radio in 4-H Club Work, by Lillian Murphy, home demonstration agent, Vigo County, Ind.

In answer to the question, Whom do you like to hear on 4-H radio programs? 205 club members designated 2 favorites from a list of 9 speakers on 4-H broadcasts. The results were as follows:

Type of speaker	Members indicating preference
4-H Club members.....	141
County extension agents.....	65
Local leaders of 4-H Clubs.....	56
Farmers and homemakers.....	48
Specialists at State colleges.....	24
State 4-H leaders.....	22
Former 4-H members.....	19
National 4-H leaders.....	18
Boosters of 4-H Club work.....	17

Negro Extension Methods

A study of extension work with Negroes in 1938 as compared to 1936 and 1934 indicates certain important trends. The number of Negro farmers adopting improved practices as the result of the activities of the Negro agricultural agent increased from 448 per agent in 1934 to an average of 554 per agent in 1938, an increase of more than 23 percent. During the same 5-year period the number of Negro homes in which practices were changed due to the activities of the Negro home agent increased from 331 per agent to 525 per agent, or 58 percent.

Over the 5-year period there was a decline of about 18 percent in the number of method demonstrations conducted by the agricultural agents and a decline of about 10 percent in the number of such demonstrations held by

the home demonstration agents. The number of meetings held at result demonstrations by men agents decreased 61 percent over the 5-year period, while the meetings held at result demonstrations by women agents decreased only 24 percent.

During the 5-year period there was on the average a substantial increase in the number of local leaders assisting the agent with the conduct of extension. Programs were cooperatively planned in more communities. More news stories were published. More leader-training meetings were held. Fewer individual letters were written. The number of farmers calling at the agricultural agent's office decreased 14 percent, whereas the number of office calls handled by the Negro home demonstration agents increased 5 percent during the 5-year period included in the analysis. The small losses in number of other teaching means and agencies per agent in 1938 over 1934 were relatively unimportant.

The data in this study, reported in Extension Service Circular 340, were taken from the annual statistical reports of Negro extension agents for the years 1934, 1936, and 1938.

Junior Leaders Strengthen 4-H Clubs

4-H Club work is carried on successfully where the enthusiasm and vigor of junior leaders are combined with the experience, stability, and vision of the adults. Two adult leaders with two or three junior assistants make a particularly effective combination. These are some of the conclusions which H. A. Pflughoeft, Minnesota assistant State 4-H Club leader, sets forth in his thesis, Junior Leadership in 4-H Club Work.

Using data from the Kansas, Minnesota, Missouri, and Wisconsin study of 4-H leadership, he compared 189 4-H Clubs having one or two adult leaders, with the 124 clubs that had the leadership of one or more juniors in addition to one or two adults. The results were as follows:

4-H Clubs having adult leaders only:

Average size of clubs.....	12.8
Percentage of members completing.....	80.5
Percentage of members reenrolling.....	58.7

4-H Clubs having adult and junior leaders:

Average size of clubs.....	20.5
Percentage of members completing.....	85.3
Percentage of members reenrolling.....	66.1

■ Six schools in Dona Ana County, N. Mex., and serving hot school lunches and using surplus commodities. One school has an interesting project in which hot breakfasts instead of lunches are served.

By Their Own Bootstraps

A. F. HOFFMAN, Jr., County Agent, Delta County, Formerly in Phillips County, Colo.

■ The southwestern part of Phillips County was hit harder by drought than any other part of that county—more foreclosures, more seed loans in proportion, more FSA loans. During the years when wheat crops were good and prices high, the farmers in that area went out of the livestock business. This community is known as Highland Center. Conditions found in that community have been true more or less in other parts of Phillips County, in a belt of “hard land” running from the northeast corner of the county to the southwest and intensified in the Highland Center community.

We thought we were doing some planning work there through our farm and home council—a group hand-picked by me. When it was suggested that agricultural planning committeemen be elected, I arranged a meeting at the Highland Center school.

Our first planning meeting at Highland Center was attended by about 20 farmers and was held in the boiler room because of the cold. After we had talked a little while, a man sitting next to me said: “What time is it, Bert? If it's 10:30, I've just got to leave—my wife will kill me.” It was 12:46 a. m. but none of us had thought anything about the time. We arranged for another meeting 1 week later and decided to start at 7 p. m. so there would be more time for discussion. Twenty-nine farmers were present, and we adjourned at 12:30 a. m. The third meeting lasted from 7 to 12:20. Other meetings which I did or did not attend were held, and the community came out with a program as sound as a group of bankers could have written. It was their program, and through the development of it they had increased their morale and convinced themselves of the value of certain improved farm practices which it would have taken me a long time to persuade them to adopt.

All of the seven communities worked out their own programs in the same way—slowly—with no one providing the answers for them. They all elected their committees democratically. Interest in planning grew gradually and slowly. The county organization was completed the same way. Soon there were recommendations relative to demonstrations and meetings they wanted the county extension agent to conduct. But as far as planning meetings was concerned, more were held without my presence than with it.

A coordinating committee was established and regular meetings held. The community and county programs were presented to this group. As a result, the seed-loan program was used to encourage better-balanced farm-

ing and the use of better seed. The Farm Security Administration also encouraged these practices. FSA fell into line with a program for more and, particularly, better dairy cows. Better poultry and hogs were promoted. Feeding schools and breeding schools were held, and a very condensed feeding handbook was published and distributed. Two Guernsey bulls were bought cooperatively. A few registered heifers were bought for clients of FSA; and a number of good grades, most of them Guernseys, were shipped into the county. One FSA client was started with a purebred herd of Brown Swiss. These changes to good dairy cattle were financed with very little extra cost. In each case the client was required to be interested and to sell the cattle he had, using the proceeds with or without a small amount of additional money, to buy the superior animals, most of which had cow-testing records. R. I. Charbonnel, at that time FSA supervisor for Phillips County, cannot be given too much credit for the understanding and helpful spirit he displayed. He took a number of his clients to dairy centers in northern Colorado so they could learn about dairying first-hand.

One requirement necessary to get into this dairy business was some adjustment on the part of the client to indicate his interest. In most cases the adjustment was in the feed supply. A “plant more sorghums” campaign was in progress about this time, and it progressed favorably with all people but particularly with those having financial difficulties. The result was more cow and poultry feed and more cream and eggs, all of which helped to pay the grocery bill.

Before all these things began to happen, Phillips County had about the lowest percentage of repayment on FSA loans and seed loans in the region, although farming conditions were better than in the Dust Bowl, no doubt. When I left Phillips County, the county had been hitting the top in collections for both types of loans. I believe that people had been living better; and they were, very definitely, not licked.

FSA placed the only clinic in this region in Phillips County last summer because the planning committee had been considering the health problems of the county. About a dozen specialists, including four psychologists and one psychiatrist, were imported. The most noticeable thing, in their opinions, was that, although 22 percent of heads of families and 13 percent of the wives were suffering from functional disorders, the people were very definitely not licked. They knew that they would pull out of it. They had

plenty of fight and knew how they were going to fight.

I have never consciously attempted to aid the low-income group any more than any other group. I have felt that all people in the county have an equal right to the services of the county extension office. I have tried to treat them all alike. If I have had any success in reaching the aforesaid group, possibly it is because of this. People do not like to be treated as members of problem groups, even if they are part of such a group.

The people in Phillips County have lifted themselves up by their own bootstraps, but such Government agencies as Seed Loan, FSA, and AAA have been very cooperative.

■ CON S. MADDOX, 37, Washington extension animal husbandman, died on May 3 as he was driving toward his home in Pullman after conducting an Extension Service meeting in Goldendale.

Making a strenuous field trip, Maddox took a Washington State College student with him to help with the driving on the final stage. After pausing for dinner on the way home after a stockmen's meeting, Maddox asked the student to drive and stretched out to rest and sleep. When the lad finished the trip to Pullman and attempted to wake Maddox, he found that the animal husbandman had died. Physicians stated that death was due to coronary occlusion.

Widely known throughout the Pacific Northwest for his work in encouraging the improvement of livestock breeds, Maddox came to Washington in December 1934. Previous to coming West, he had served as animal husbandman in Nebraska and as county agent in Clay County, S. Dak. He graduated from the University of Missouri in 1925 and later took graduate work at the same institution. Immediately following the completion of his college work, Maddox was employed in doing experimental breeding work at the Sni-A-Bar farms near Kansas City, which cooperated with the University of Missouri and the United States Department of Agriculture.

More Grubstake

The Washburn County, Wis., “grubstake” plan described in the first article in the May 1941 REVIEW is to be extended to at least three and possibly eight new counties in 1941. Josephine Pollock, who is chairman of a special committee on family food supply at the Wisconsin College of Agriculture, as well as assistant State home demonstration leader, reports that “grubstake,” which provides for increasing home production of food for family needs, has been adopted in Sawyer, Lincoln, and Taylor Counties and that these counties are going ahead with their plans.

Land use planning committees in Price, Oneida, Burnett, and Lafayette Counties and the county board of Eau Claire County have recommended adoption of the plan in their areas.

Young Delaware Negroes Grow Gardens

■ In 2 Delaware counties, 200 Negro boys and girls are engaging in a variety of 4-H Club projects as members of 12 clubs. Last year, the same 2 counties had 10 clubs with a total enrollment of 143 members.

Although the increase in total enrollment is significant, the interest of the Negro—4-H Clubs in basing their 1941 programs on a "live at home" philosophy is even more important. The boys and girls, under the guidance of able local leaders who are usually principals or teachers, have absorbed a surprising amount of knowledge about the part they can play in a democracy geared to defense effort.

Although the Negro groups are the only 4-H Clubs in Delaware operating in schools, there is a definite reason for this set-up. Leadership in the rural Negro community is confined almost entirely to teachers. The homes of the members are usually not large enough for 4-H meetings, and so the Negro school has become a community center for all community development.

Most Popular Project

Home gardening is by far the most popular project among both boys and girls. But with home gardening goes an assortment of other projects typical of 4-H Club activities throughout the Nation. Perhaps the true picture of Negro 4-H Club work in Delaware can be obtained by considering 1 club that serves as a good sample of the 12 now functioning.

Just off a paved highway is a two-room, attractive Negro school, set into a picturesque clearing in a pine woods. This school, called Trinity, is the home of the Trinity 4-H Club. The club's 22 members, equally divided between boys and girls, have a garden at the school where they lay out the garden plot, till the soil, plant, cultivate, control insect and disease pests, and harvest produce. Although this 4-H cooperative garden serves as a trial ground for new ideas that the boys and girls can take to their home vegetable gardens, there is as great a value attached to the harvested vegetables, for the vegetables are canned by the local Negro home demonstration club and then used during the winter for hot school lunches.

When you visit Trinity School, Principal John Horner is quick to tell you of the work his boys are doing as 4-H members. He is proud of their accomplishments that he sees frequently as he visits the members at their homes.

Since the beginning of the Trinity 4-H Club 6 years ago, Principal Horner has been local leader for the boys. Today his enthusiasm for the work is as evident as it was when he helped to start the club. Boys of the Trinity

Club have an assortment of projects ranging from poultry and swine to gardens.

Girls in the Trinity Club have been interested mostly in sewing. But this year they are working on canning projects in connection with the defense program, and several of the girls are active as home gardeners. They assist with the 4-H garden at the school just as actively as the boys. Sara Dickerson, teacher in the school, acts as local leader for the Trinity 4-H girls.

Both Principal Horner and Miss Dickerson are assisted with their 4-H Club guidance work by Anne B. Moore, veteran Sussex County 4-H Club agent; and C. E. McCauley, boys' 4-H Club agent-at-large for the Delaware Extension Service.

Here is an excerpt from a résumé of the club's 1940 garden activities prepared by one of the members:

"The Pinder boys, three in number, each had a splendid garden filled with eight or more different vegetables. Vegetables from their garden were used fresh during the spring, summer, and fall; and those left over were canned for winter eating. The boys also exhibited some of their vegetables at the Kent and Sussex Fair and won some prizes. These boys deserve great credit because they did all of their garden work by hand.

"Clarence and Estella Dickerson, a brother and a sister, had gardens and divided the work. Clarence could use the team, so he did the plowing and cultivating, and Estella did the hoeing. Clarence and Estella also exhibited at the fair."

Then the résumé closes with—

"Each member of the club was a loyal mem-

ber. Our members kept garden records and used proper fertilizers and insect-destroying materials. We are striving to do a better job this year, and believe we will."

The words, "We are striving to do a better job this year, and believe we will," neatly penciled by a member of the Trinity 4-H Club, reflect the attitude of rural Negro youth of Delaware who are active 4-H Club members. Men and women local leaders and the staff workers of the Extension Service who have watched the development of many of these boys and girls say that the 4-H Club program has brought them healthful, farm-produced fresh and canned foods with a resulting better health standard. They felt, too, that the recently intensified home-production program will result in the boys and girls carrying the "Farm First for Food and Feed" goal along when they grow too old for club work and take on added responsibilities of later life.

A well-rounded array of projects gives the Negro 4-H'er sound training in farm and home operations that are sure to be useful now and in years to come.

But probably the basic result of Negro 4-H Club work in Delaware's Kent and Sussex Counties is the development of the individual. 4-H leaders say that in Negro communities where there is no 4-H work, the boys and girls are backward and self-conscious. This development of the individual, of the individual's personality, responsibility, the will to work, and the all-round training of head, heart, hands, and health, is a fundamental result of consistent 4-H activity among Negro club members.

Reporting the Story

■ Good extension stories are the order of the day in Missouri where agents have been working away at the problem for the past year. This sample written by Mrs. Claire L. Montgomery, home demonstration agent in Texas County, well exemplifies the Missouri definition of a good result story—one that tells in specific convincing terms the benefits resulting on farms, in farm homes, or in rural communities from the adoption of practices recommended by the Extension Service.

"Better school work, fewer problems of discipline, and improved health among the pupils were noticeable results of the hot lunches served in 23 rural schools in Texas County, Mo., during the past year, as reported by Mrs. Claire L. Montgomery, home demonstration agent.

"One teacher said in reference to the advantage and satisfactions of the hot dish, 'Its

value cannot be expressed in words. The attendance is much better, pupils have more interest in school, learn better, and increase in weight.' Another said, 'Children enjoyed the hot lunch, formed good habits in table manners, had good appetites, and were less hurried during the meal. I believe the hot lunch prevented colds.' And still another said, 'Many children who were not bringing adequate lunches from home were supplied. Our discipline problems were decreased very much.'

"So well pleased were both teachers and parents in these communities that a campaign is now in progress throughout Texas County, under the leadership of the county extension office, to make similar benefits available to many additional schools. A great many families will send supplies from home, and these will be supplemented wherever necessary by surplus commodities."

Interesting Folks in Planning

I suppose the reason that we have been able to interest folks in planning is that in all of the activities of the extension office and the AAA office we have paid very little attention to whether an individual was considered in one group or the other. In other words, any individual who calls at the extension office is entitled to the same consideration and courtesy. This policy has been followed for years.

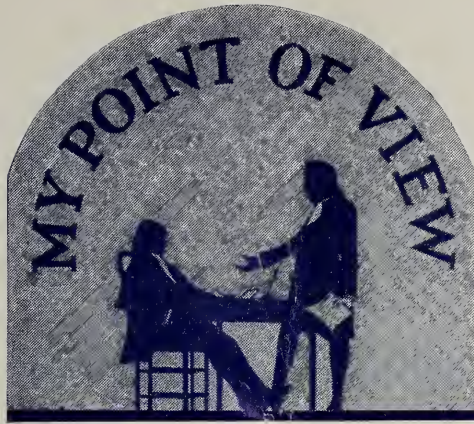
The cooperative spirit existing between the Farm Security Administration, Emergency Feed and Seed Loan offices, and our office is a healthy situation which helps us all. We feel that all the agencies set up to serve the public should be used to the best possible advantage.

In planning, one of the things that is important is community spirit, community effort, and cooperation. It has been my experience that some of the folks that are most interested in doing something for their community might be considered among the low-income farmers; however, they are just as vitally interested and concerned with the future of their community as is the individual who might be somewhat better off financially. In fact, we have gained some of our best ideas regarding planning from these folks.

I think another significant thing shown in the 1940 census was that the number of farmers in El Paso County decreased from previous census reports. A great many of the unstable farmers that I think have been referred to as the lower-income group are no longer farming, and the ones that are left very definitely will remain; and although climatic conditions such as drought have made it very difficult, they plan to stay.—*C. N. Vickers, county agricultural agent, El Paso County, Colo.*

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This is a place where agents are invited to express their ideas and opinions about anything which seems important to them. Those things which please, bother, or help one agent in his work are just the things which prove valuable to other agents.

Speaking of Export Markets

From the best information that I can get, the outlook for domestically consumed products is favorable for 1941 and may continue favorable for a year or two. However, the markets for products, a large part of which are normally exported, such as cotton, tobacco, wheat, and certain fruits have already been seriously affected. When World War No. 2 is over, there will very probably be a temporary increase in demand for all of these products, but it is highly probable that the countries which win the war will reorganize Europe on a nationalistic basis, produce as large a portion of these agricultural products as possible at home, and obtain the remainder from their colonies or from the nations with which they can work out the most favorable trade relations.

I do not believe that we are going to lose all of the market for any of the crops mentioned, but I believe it will be a long time before we get back as much of the foreign market as we have in past years considered normal. This will mean serious readjustments of our whole national economy. The first group to be affected will probably be southern farmers, but in my opinion eventually all farmers in the United States and most of the people engaged in other lines of business will be affected by the adjustments which will have to be made.

If the foregoing opinions are even reasonably correct, the sooner individual farmers throughout this State are fully informed of the situation the better chance they will have to make necessary adjustments. I, therefore, think it highly important that we so organize our work as to not only give to all farm people the present outlook but be in position to present to them information regarding the rapid changes brought about by our defense program and World War No. 2.

I do not think it is our job to tell farm people what to do, but it is our job to furnish them the best facts obtainable on which to base action. If we do not have our work so organized as to present these facts to large numbers of people, we should reorganize so that we do.—*Jno. R. Hutcheson, director of extension, Virginia.*

For the Youngest

A play kit for young children was made by members of the Willing Workers Club in Woodward County as a result of the child-development program. The members brought cheese boxes, wooden boxes, tacks, paint, and other material, and turned them into interesting toys for group play. The club members had been convinced that children should profit by their opportunity for social contact at the local club meetings and that it could be done only where proper toys were made available. This club, like 10 others in the county, selected a woman in its community to supervise the children during each monthly club meeting. Many demonstrators made toys for their own children similar to those made for the club play kit.—*Mildred V. Schaub, home demonstration agent, Woodward County, Okla.*

ON THE CALENDAR

American Association of Agricultural College Editors, Kingston, R. I., July 13-18.
 Thirty-third Annual Convention, Vegetable Growers Association of America, Columbus, Ohio, August 4-7.
 The International Apple Association Annual Meeting, Toronto, Ontario, August 5-8.
 Western Regional Extension Conference, Bozeman, Mont., August 13-16.
 National Food Distributors Association Annual Meeting, Chicago, Ill., August 20-23.
 Eastern States Exposition, Springfield, Mass., September 14-20.
 Thirty-first Annual Pacific International Livestock Exposition, Portland, Oreg., October 4-11.
 National Dairy Show, Memphis, Tenn., October 11-18.
 American Royal Forty-third Annual Livestock and Horse Show, Kansas City, Mo., October 18-25.
 American Country Life Association Meeting, Nashville, Tenn., October 21-24.
 National Home Demonstration Council, Nashville, Tenn., October 21-22.
 Fifty-fifth Annual Convention of the Association of Land-Grant Colleges and Universities, Washington, D. C., November 10-12.
 Diamond Jubilee of National Grange, Worcester, Mass., November 12-21.
 International Livestock Exposition, Chicago, Ill., November 29-December 6.
 Twenty-third Annual Meeting, American Farm Bureau, Chicago, Ill., December 7-12.



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The Department of Agriculture has these
publications available:

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School Lunches Using Farm Surpluses. Miscellaneous Publication 408.

Food for Children. Farmers' Bulletin 1674.

Eat the Right Food To Help Keep You Fit.

Are We Well Fed? Miscellaneous Publication 430. (For sale by the
Superintendent of Documents, Government Printing Office, Washington,
D. C. Price 15 cents.)

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